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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,862	06/01/2001	Juha-Matti Sainio	796.392USW1	1447

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EXAMINER	
UBILES, MARIE C	

ART UNIT	PAPER NUMBER
2642	10

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/871,862	Applicant(s) SAINIO, JUHA-MATTI	
	Examiner Marie C. Ubiles	Art Unit 2642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-13 and 15-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-13 and 15-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on February 23, 2004 has been entered. Claims 1, 3-10, 12-13 and 15-22 have been amended. Claims 2 and 14 have been cancelled. No claims have been added. Claims 1,3-13 and 15-22 are still pending in this application, with claims 1, 9 and 19-22 being independent.

Claim Objections

2. Claim 12 is objected to because of the following informality: On line 2, "is" is missing before "selected". Appropriate correction is required.

Claim 8 is objected. In claim 8, the limitation "re-sending of the service request is restricted by a limit." The term "limit" renders the limitation too broad.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4-6, 7-8 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 5,999,610).

As for claim 1, Lin et al. disclose a method for managing communications between a service origination node and a plurality of service nodes (i.e. method of initiating services in a telecommunications network)(*See Abstract*), the system has a service switching point SSP 104 and two service control points SCP 600-SCP 602 (i.e. including at least one switching point and at least two control points for controlling services)(*See Figure 6*); at event 1, the SSP 104 encounters a trigger and sends a query (i.e. service request) to a mediation point MP 200, the MP 200 queries one SCP at a time (i.e. wherein a service request is sent by the switching point to a control point in order to initiate the service); the MP 200 formulates a message to be sent via data link 606 to SCP 600 at event 2, the MP 200 awaits a response from SCP 600 at event 3, the MP 200 will query the second SCP 602 at event 4 over data link 608 and await a response from SCP 602 at event 5, the MP 200 will then formulate a response to be returned to the SSP 104 at event 6 concerning instructions for processing the call, alternatively, based on the response received by SCP 600, the SCP 602 may not be queried and a response will be formulated and returned to the SSP 104 (i.e. setting at least two control point address to send a service request; and sending the service request to the control point addresses one at a time).

It is inherent from Lin's et al. system that SCPs 600-602 will each have unique addresses, as they operate as separate service control points.

While, Lin et al. does not explicitly discuss that the service is sent to each service control point until initiation of the service at one of the control points or when the SCP refuses to initiate the service, Lin et al. teach "based on the response received by SCP

600, the SCP 602 may not be queried and a response will be formulated and returned to the SSP 104". It would have been obvious to one of ordinary skill in the art at the time was made to conclude from Lin's et al. teachings, that response received from SCP 600 is one for initiation of services or that SCP refused to initiate the service and therefore a query will not have to be sent to SCP 602 after such response.

As for claim 4, Lin et al. discloses the use of an intelligent network, as seen by the use of SCPs and SSPs (i.e. the telecommunications network is an intelligent network)(*See Figure 6*) and a multiply-subscribed trigger occurring if several SCPs have the ability to provide a service to a particular subscriber (i.e. the addresses are set in the trigger data of intelligent services).

As for claim 5, the claimed "priority indication is attached to the addresses and another address selected on basis of the priority indication" reads on the sequential querying of SCPs (*See Detailed Description, Col. 9, lines 29-30*). It would have been obvious to set one of the SCPs as the control point to be queried by assigning a priority, and if service does not initiate on the first contacted SCP to go to the next priority SCP, as per the established sequence. For example, the nearest or fastest SCP may be the "priority" SCP.

As for claim 8, the broadly claimed 'limit' for restricting the re-sending of the service request reads on the time that the MP 200 awaits for the response from SCP 600 before querying SCP 602.

Claims 6-7 and 19-20 are rejected for the same reasons as claim 1. As per the limitation reciting the SCPs having databases with information relating to services, it is inherent for an SCP to have such feature (*For reference, see Background of Invention, Col. 2, lines 28-35*).

4. Claims 3, 9, 10-13,15-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 5,999,610) in view of Moharram (US 5,825,860).

As for claim 9, Lin et al. discloses the system as claimed, except for providing from the at least one control point congestion information to the switching point, the service request is sent to one address selected on the basis of congestion information; and when this address does not initiate the service, the service request is sent to another address selected on the basis of the congestion information, until the service is initiated at one of the addresses;

As for claims 10-13, Lin et al. lacks the limitations of wherein the congestion information is sent by at least one control point, wherein the congestion information restricts the rate the service requests are sent to the control point; wherein the congestion information is based on the number of service requests sent by the switching point to the control point; wherein the address having free capacity according

to the congestion information is selected; and wherein the address having the least restricting information is selected.

Moharram teaches "If one SCP in the load sharing SCP group is overloaded, it tells the SSPs to regulate the traffic destined to it. Since the SSPs view the load sharing SCP group as a single entity and the traffic control item is identified by its Global Title Address (GTA) and Translation Type (TT), the SSP applies the control to all calls that generate queries with matching GTA/TT. For example, if one of the multiple SCPs, say SCP-A, in a load sharing SCP group sends an overload control request to the SSP, all calls which match the GTA/TT under control will be blocked by the SSP even if the other SCPs in the group, namely SCP-B and SCP-X could process those queries. This results in poor SCPs resources utilization.[...] according to a first broad aspect provides in an intelligent telecommunications network having a plurality of service control points (SCPs) forming a load sharing group, a method for managing traffic consisting of queries to the load sharing group, comprising the steps of: maintaining respective controls lists for the plurality of SCPs, each controls list identifies controls which are active at the corresponding SCP; sending a query intended for the load sharing group to a mediation point (MP); and selecting, by the MP which has access to the respective controls lists, a particular SCP of the plurality of SCPs for which the controls list of the particular SCP does not identify a control relating to the query as being active; and sending, from the MP, the query to the particular SCP. " (*See Background, Col. 3, lines 53-65 and Summary, Col. 4, lines 51-64*).

Moharram further teaches "When the selected SCP 102-B or 102-X receives the query, it processes the query and sends a response to the SSP 110. If the selected SCP 102-B or 102-X detects congestion subsequent to receipt of the query, it still processes the query and sends the response back to the SSP 110, but that SCP further sends a SSC message to the MP 106 informing it with its status, the MP adds the control to this SCP controls list. When the MP 106 receives a new query message not having a control indication from the SSP 110, it may check if a control exists by attempting to match the GTA/TT of the query in all the SCPs controls lists 112. If no control exists, MP 106 then may route query to any SCP 102 in the group 100. If a control exists on a specific SCP 102, the MP 106 selects another SCP 102 for which that control is not active from the remaining SCPs in the group 100 and routes the query to it. If all SCPs 102 are overloaded, the MP 106 discards the query. The SSP 110 should then route the call to final treatment or default routing. If the congestion level changes at one of the SCPs 102 in the group, for instance the congestion relating to an active control on SCP 102-A may decrease below a predetermined threshold, then SCP 102-A shall send a SubSystem Available (SSA) message to instruct the MP 106 to remove the control from its controls list. Upon receipt of this SSA message, the MP 106 removes the indicated control from the SCP-A controls list 112-A." (*See Detailed Description, Col. 6, lines 23-49*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lin et al. system by adding the method of the MP querying a SCP, part of a load sharing group, and based on the information on the

control list send the query to the particular SCP for further processing of service, as per Moharram's teachings. Further, it would have been obvious to get the congestion information from each service control point address, as Moharram's states that one problem with treating the SCP as a group is "if one of the multiple SCPs, say SCP-A, in a load sharing SCP group sends an overload control request to the SSP, all calls which match the GTA/TT under control will be blocked by the SSP even if the other SCPs in the group"; thus by modifying Lin et al. in view of Moharram, a system that will not result in poor SCPs resources utilization based on congestion information, will be provided.

As for claims 10-13, it would have been obvious to modify Lin's et al. system by routing queries to the SCPs based on congestion information on the control list of each SCP, as taught by Moharram. It is obvious from Moharram's teachings that the congestion or overloading will be generated by the number of requests sent by the SSP and that the selected SCP will be the one having "no active control" (i.e. having free capacity/ having the least restrictive congestion information) .

As for claims 16-17, while Lin et al. does not directly discuss that the service is sent to each service control point until initiation of the service at one of the control points or when the SCP refuses to initiate the service, Lin et al. teach "based on the response received by SCP 600, the SCP 602 may not be queried and a response will be formulated and returned to the SSP 104". It would have been obvious to one of

ordinary skill in the art at the time was made to conclude from Lin's et al. teachings, that response received from SCP 600 is one for initiation of services or that SCP refused to initiate the service and therefore a query will not have to be sent to SCP 602 after such response.

As for claim 18, Lin et al. discloses the use of an intelligent network, as seen on the use of SCPs and SSPs (i.e. the telecommunications network is an intelligent network)(*See Figure 6*) and a multiply-subscribed trigger occurring if several SCPs have the ability to provide a service to a particular subscriber (i.e. the addresses are set in the trigger data of intelligent services).

Claims 3, 15 and 21-22 are rejected for the same reasons as claim 9. As for claim 15, the limitation "setting a maximum number of initiation attempts" reads on Lin's et al. system about not querying the SCP 602, based on the response received from SCP 600; in this case the maximum number for initiation attempts is one before going to the next SCP.

Response to Arguments

5. Applicant's arguments with respect to claims 1,3-13 and 15-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dabbs et al. (US 5,963,630) teaches a mediation service control point within an intelligent network.

Tucker et al. (US 6,532,285) teaches a method and system for providing multiple services per trigger.

Tuunanen et al. (US 6,463,140) teaches execution of services in an intelligent network.

Malik (US 6,018,574) teaches a system and method for activation of an enhanced telecommunication service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie C. Ubiles whose telephone number is (703) 305-0684. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marie C. Ubiles
April 21, 2004.

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